Response to Rejections of Claim 1 and 7-19 under 35 USC § 103

Independent claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schuetze in view of Li. The Office Action of August 19, 2002 ("the Office Action") explained the rationale for this rejection in Section 4, on pages 4-6.

To establish a prima facie case of obviousness of claim 1, the prior art references must teach or suggest all the claim limitations. Neither Schuetze, nor Li, teaches or suggests the claimed limitation of an image surrounded by text that is not anchor text. Nothing in Li suggests how text associated with an image may be located if it is not anchor text. Applicants therefore respectfully request that this rejection be withdrawn and that amended claim 1 be allowed.

As to claims 7-19, which depend from amended claim 1, they are also believed to be in allowable condition for the reasons discussed above with regard to claim 1.

Response to Rejections of Claim 49 and 20-38 under 35 USC § 103

Independent claim 49 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schuetze in view of Li. The Office Action explained the rationale for this rejection in Section 4, on pages 4-6 and 13-14. To establish a prima facie case of obviousness of claim 49, the prior art references must teach or suggest all the claim limitations. Neither Schuetze, nor Li, teaches or suggests the claimed limitation of an image feature associated with the non-text content of an image included in a document. Applicants therefore respectfully request that this rejection be withdrawn and that amended claim 49 be allowed.

The Office Action in Section 5, on page 14, objects to claims 23-27 and 29-38 and indicates that they would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants respectfully request that these objections be withdrawn and submit that claims 22-38, which depend from claim 49, are allowable for the reasons discussed above with regard to their base claim.

Amendment *pursuant to 37 CFR 1.116(c)*

Response to Rejections of Claim 39 and 41-42 under 35 USC § 103

Independent claim 39 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schuetze in view of Li. The Office Action explained the rationale for this rejection in Section 4, on pages 4-6. To establish a prima facie case of obviousness of claim 39, the prior art references must teach or suggest all the claim limitations. Neither Schuetze, nor Li, teaches or suggests the claimed limitation of a first feature representing a first sub-set of documents of the collection that have been accessed by a first user.

Claim 41, which depends from claim 39, stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schuetze in view of Li. The Office Action explained the rationale for this rejection in Section 4, on pages 9-10. To establish a prima facie case of obviousness of claim 41, the prior art references must teach or suggest all the claim limitations. Neither Schuetze, nor Li, teaches or suggests the limitations of: 1) calculating the number of times the first user accessed each document in the collection of documents; and 2) creating the first vector having a number of dimensions equal to the number of documents in the collection of documents, and the first vector further having as each element a numeric value representative of the number of times the first user has accessed the corresponding document. Nor do the combined references suggest the claimed limitation of a first feature representing a first sub-set of documents of the collection that have been accessed by a first user. Applicants respectfully request that the rejection of claim 41 be withdrawn and submit that the claim is now in condition for allowance.

Claim 42, which also depends from claim 39, stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schuetze in view of Li. The Office Action explained the rationale for this rejection in Section 4, on page 11. To establish a prima facie case of obviousness of claim 42, the prior art references must teach or suggest all the claim limitations. Neither Schuetze, nor Li, teaches or suggests the limitations of the value representing the number of times the first user has accessed a document is calculated as the token frequency weight of that document multiplied by the inverse context

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frequency weight of the document. Nor, as discussed previously above, do the combined references teach all the limitations of claims 41 and 39, from which claim 42 depends. Applicants therefore request that this rejection be withdrawn and submit that claim 42 is in condition for allowance.

Response to Rejections of Claims 43, 45-48 under 35 USC § 103

Independent claim 43 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schuetze in view of Li. The Office Action explained the rationale for this rejection in Section 4, on pages12-13. To establish a prima facie case of obviousness of claim 43, the prior art references must teach or suggest all the claim limitations. Neither Schuetze, nor Li, teaches or suggests the claimed limitations of: 1) a first feature being an image feature associated with the non-text content of an image included in a document; and 2) a second feature being a one of a user information feature and a genre feature. Applicants therefore respectfully request that the rejections of claim 43 and its dependent claims, claims 45-48, be withdrawn.

Reconsideration/Admittance Requested

In view of the foregoing remarks and amendments, reconsideration of this application and allowance thereof are earnestly solicited.

Fee Authorization And Extension Of Time Statement

No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

Amendment *pursuant to 37 CFR 1.116(c)*

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is hereby authorized to call Applicant's attorney, Nola Mae McBain, at Telephone Number (650) 812-4264, Palo Alto, California.

Respectfully submitted,

Nola Mae McBain
Attorney for Applicant(s)
Registration No. 35,782
Telephone: 650-812-4264

Date: October 9, 2002

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Amendment *pursuant to 37 CFR 1.116(c)*

APPENDIX A

Marked Up Amended Claims Under 37 C.F.R. 1.121(c)(1)(ii):

Appendix A sets forth a marked up version of the prior pending amended claims for their corresponding pending claims with additions shown with underlining (e.g. new text) and deletions shown with a strikethrough (e.g. delete text).

Claim 44 is cancelled.

1.   (Twice Amended) A method for quantitatively representing documents in a vector space, comprising the steps of:

identifying a first document to be processed from a plurality of documents;

extracting a first feature corresponding to the first document from the plurality of documents, the first feature comprising text surrounding an image included in the document, the text surrounding the image not being anchor text;

converting the first feature to a first vector; and

associating the first vector with the first document.

22.   (Twice Amended) The method of claim 49, wherein the first feature comprises the color histogram for an the image represented by included in the first document.

39.   (Twice Amended) A method signal representing instructions for quantitatively representing in a vector space users of a collection of documents, the instructions comprising the steps of:

identifying a first user to be processed from the users of the collection of documents;

extracting from the collection of documents a first feature representing a first sub-set of documents of the collection that have been accessed by the first user;

converting the first feature to a first vector; and

associating the first vector with the first user.

41. (Twice Amended) The ~~method~~ signal of claim 39, wherein the converting ~~step~~ instruction comprises ~~the steps of~~:

identifying each unique document in the collection of documents;

calculating the number of times the first user accessed each document in the collection of documents; and

creating the first vector having a number of dimensions equal to the number of documents in the collection of documents, and the first vector further having as each element a numeric value representative of the number of times the first user has accessed the corresponding document.

42. (Twice Amended) The ~~method~~ signal of claim 41, wherein the value representative of the number of times the first user has accessed the corresponding document is calculated as the token frequency weight of the corresponding document multiplied by the inverse context frequency weight of the corresponding document.

43. (Amended) A computer-readable medium containing instructions for causing a computer-system to quantitatively representing documents in a vector space, by the steps of:

identifying a document to be processed from a plurality of documents;

selecting an image feature as a first feature ~~from a set of multi-modal features including a text feature, a hyperlink feature, an image feature, a user information feature, and a genre feature~~, the image feature being associated with the non-text content of an image included in the document;

extracting from the document information associated with the first feature;

converting information associated with the first feature into a first vector;

associating the first vector with the document;

selecting a second feature from ~~the~~ a set of multi-modal features including a user information feature and a genre feature;

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extracting from the document information associated with the second feature;

converting the information associated with the second feature into a second vector; and

associating the second vector with the document.

45. (Amended) The computer-readable medium of claim 44- 43 wherein the first feature comprises a color histogram for an- the image included in the document.

47.   (Amended) The computer-readable medium of claim 44 43 wherein the first feature comprises color complexity of an- the image comprising part of included in the document.

49.   (Amended) A method for quantitatively representing documents in a vector space, comprising the steps of:

identifying a first document to be processed from a plurality of documents;

extracting a first feature corresponding to the first document from the plurality of documents, the first feature comprising an image feature associated with non-text content of an image included in the first document;

converting the first feature to a first vector;

associating the first vector with the first document;

extracting a second feature corresponding to the document, the second feature comprising a one of a text feature, a hyperlink feature, a user feature and a text genre feature;

converting the second feature into a second vector; and

associating the second vector with the first document.

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